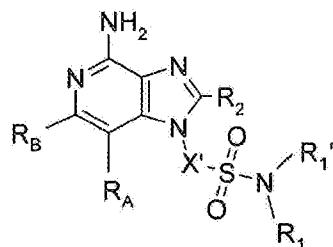


**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (canceled)
2. (original) A compound of the formula (Ia):



(Ia)

wherein:

X' is selected from the group consisting of -CH(R<sub>9</sub>)-, -CH(R<sub>9</sub>)-alkylene, and -CH(R<sub>9</sub>)-alkenylene; wherein the alkylene and alkenylene are optionally interrupted with one or more -O- groups;

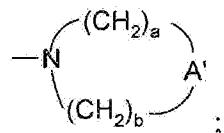
R<sub>1</sub> and R<sub>1</sub>' are independently selected from the group consisting of:

- hydrogen,
- alkyl,
- alkenyl,
- aryl,
- arylalkylenyl,
- heteroaryl,
- heteroarylalkylenyl,
- heterocyclyl,
- heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,  
 alkyl,  
 haloalkyl,  
 hydroxyalkyl,  
 alkoxy,  
 haloalkoxy,  
 halogen,  
 cyano,  
 nitro,  
 arylsulfonyl,  
 alkylsulfonyl, and  
 $-N(R_9)_2$ ,

or  $R_1$  and  $R_1'$  can join together to form a ring of the formula:



$R_2$  is selected from the group consisting of:

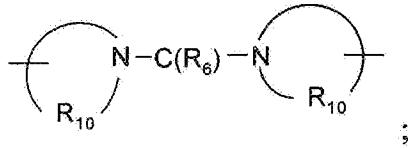
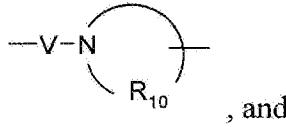
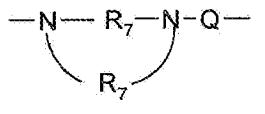
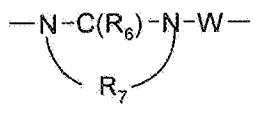
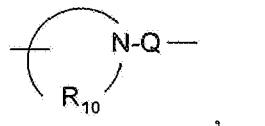
- $-R_4$ ,
- $-X-R_4$ ,
- $-X-Y-R_4$ , and
- $-X-R_5$ ;

$X$  is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclene, and optionally interrupted by one or more  $-O-$  groups;

$Y$  is selected from the group consisting of:

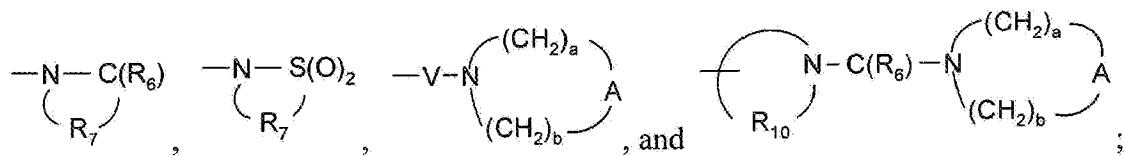
- $-O-$ ,
- $-S(O)_{0-2-}$ ,
- $-S(O)_2-N(R_8)-$ ,
- $-C(R_6)-$ ,
- $-C(R_6)-O-$ ,

$\text{-O-C(R}_6\text{)-}$ ,  
 $\text{-O-C(O)-O-}$ ,  
 $\text{-N(R}_8\text{)-Q-}$ ,  
 $\text{-C(R}_6\text{)-N(R}_8\text{)-}$ ,  
 $\text{-O-C(R}_6\text{)-N(R}_8\text{)-}$ ,  
 $\text{-C(R}_6\text{)-N(OR}_9\text{)-}$ ,



$R_4$  is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkylenyloxy, heteroaryl, heteroaryloxy, heteroarylalkylenyloxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkylenyloxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

$R_5$  is selected from the group consisting of:



$R_6$  is selected from the group consisting of  $=O$  and  $=S$ ;

$R_7$  is  $C_{2-7}$  alkylene;

$R_8$  is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

$R_9$  is selected from the group consisting of hydrogen and alkyl;

$R_{10}$  is  $C_{3-8}$  alkylene;

$A$  is selected from the group consisting of  $-O-$ ,  $-C(O)-$ ,  $-CH_2-$ ,  $-S(O)_{0-2}-$ , and  $-N(R_4)-$ ;

$A'$  is selected from the group consisting of  $-O-$ ,  $-C(O)-$ ,  $-CH_2-$ ,  $-S(O)_{0-2}-$ ,  $-N(R_4)-$ , and  $-N(Q-R_4)-$ ;

$Q$  is selected from the group consisting of a bond,  $-C(R_6)-$ ,  $-C(R_6)-C(R_6)-$ ,  $-S(O)_{2-}$ ,  $-C(R_6)-N(R_8)-W-$ ,  $-S(O)_2-N(R_8)-$ ,  $-C(R_6)-O-$ , and  $-C(R_6)-N(OR_9)-$ ;

$V$  is selected from the group consisting of  $-C(R_6)-$ ,  $-O-C(R_6)-$ ,  $-N(R_8)-C(R_6)-$ , and  $-S(O)_{2-}$ ;

$W$  is selected from the group consisting of a bond,  $-C(O)-$ , and  $-S(O)_{2-}$ ;

$a$  and  $b$  are independently integers from 1 to 6 with the proviso that  $a + b$  is  $\leq 7$ ;

$R_A$  and  $R_B$  are independently selected from the group consisting of:

hydrogen,

halogen,

alkyl,

alkenyl,

alkoxy,

alkylthio, and

$-N(R_9)_2$ ;

or  $R_A$  and  $R_B$  taken together form either a fused aryl ring that is unsubstituted or substituted by one or more  $R_a$  groups, or a fused 5 to 7 membered saturated ring that is unsubstituted or substituted by one or more  $R_c$  groups;

or R<sub>A</sub> and R<sub>B</sub> taken together form a fused heteroaryl or 5 to 7 membered saturated ring, containing one heteroatom selected from the group consisting of N and S, wherein the heteroaryl ring is unsubstituted or substituted by one or more R<sub>b</sub> groups, and the 5 to 7 membered saturated ring is unsubstituted or substituted by one or more R<sub>c</sub> groups;

R<sub>a</sub> is selected from the group consisting of:

- fluoro,
- alkyl,
- haloalkyl,
- alkoxy, and
- N(R<sub>9</sub>)<sub>2</sub>;

R<sub>b</sub> is selected from the group consisting of:

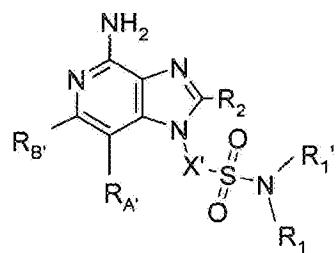
- halogen,
- hydroxy,
- alkyl,
- alkenyl,
- haloalkyl,
- alkoxy, and
- N(R<sub>9</sub>)<sub>2</sub>; and

R<sub>c</sub> is selected from the group consisting of:

- halogen,
- hydroxy,
- alkyl,
- alkenyl,
- haloalkyl,
- alkoxy,
- alkylthio, and
- N(R<sub>9</sub>)<sub>2</sub>;

or a pharmaceutically acceptable salt thereof.

3. (original) A compound of the formula (Ib):



Ib

wherein:

X' is selected from the group consisting of -CH(R<sub>9</sub>)-, -CH(R<sub>9</sub>)-alkylene, and -CH(R<sub>9</sub>)-alkenylene; wherein the alkylene and alkenylene are optionally interrupted with one or more -O- groups;

R<sub>1</sub> and R<sub>1'</sub> are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

heterocyclyl,

heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,

alkyl,

haloalkyl,

hydroxyalkyl,

alkoxy,

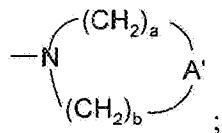
haloalkoxy,

halogen,

cyano,

nitro,  
 arylsulfonyl,  
 alkylsulfonyl, and  
 $-N(R_9)_2$ ,

or  $R_1$  and  $R_1'$  can join together to form a ring of the formula:



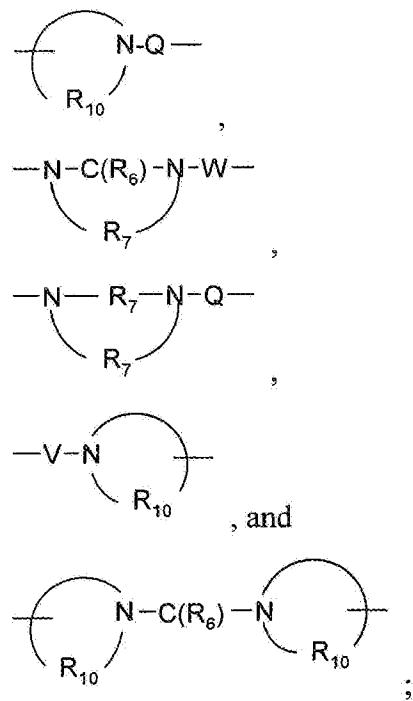
$R_2$  is selected from the group consisting of:

- $-R_4$ ,
- $-X-R_4$ ,
- $-X-Y-R_4$ , and
- $-X-R_5$ ;

$X$  is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclene, and optionally interrupted by one or more  $-O-$  groups;

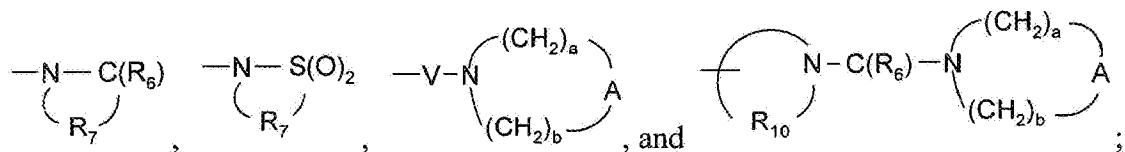
$Y$  is selected from the group consisting of:

- $-O-$ ,
- $-S(O)_{0-2-}$ ,
- $-S(O)_2-N(R_8)-$ ,
- $-C(R_6)-$ ,
- $-C(R_6)-O-$ ,
- $-O-C(R_6)-$ ,
- $-O-C(O)-O-$ ,
- $-N(R_8)-Q-$ ,
- $-C(R_6)-N(R_8)-$ ,
- $-O-C(R_6)-N(R_8)-$ ,
- $-C(R_6)-N(OR_9)-$ ,



$R_4$  is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkylenyloxy, heteroaryl, heteroaryloxy, heteroarylalkylenyloxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkylenyloxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

$R_5$  is selected from the group consisting of:



$R_6$  is selected from the group consisting of =O and =S;

$R_7$  is  $C_{2-7}$  alkylene;

$R_8$  is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

$R_9$  is selected from the group consisting of hydrogen and alkyl;

$R_{10}$  is  $C_{3-8}$  alkylene;

$A$  is selected from the group consisting of  $-O-$ ,  $-C(O)-$ ,  $-CH_2-$ ,  $-S(O)_{0-2}-$ , and  $-N(R_4)-$ ;

$A'$  is selected from the group consisting of  $-O-$ ,  $-C(O)-$ ,  $-CH_2-$ ,  $-S(O)_{0-2}-$ ,  $-N(R_4)-$ , and  $-N(Q-R_4)-$ ;

$Q$  is selected from the group consisting of a bond,  $-C(R_6)-$ ,  $-C(R_6)-C(R_6)-$ ,  $-S(O)_{2-}$ ,  $-C(R_6)-N(R_8)-W-$ ,  $-S(O)_2-N(R_8)-$ ,  $-C(R_6)-O-$ , and  $-C(R_6)-N(OR_9)-$ ;

$V$  is selected from the group consisting of  $-C(R_6)-$ ,  $-O-C(R_6)-$ ,  $-N(R_8)-C(R_6)-$ , and  $-S(O)_2-$ ;

$W$  is selected from the group consisting of a bond,  $-C(O)-$ , and  $-S(O)_2-$ ;

$a$  and  $b$  are independently integers from 1 to 6 with the proviso that  $a + b$  is  $\leq 7$ ; and

$R_A$  and  $R_B$  are independently selected from the group consisting of:

hydrogen,

halogen,

alkyl,

alkenyl,

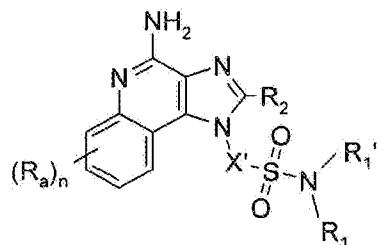
alkoxy,

alkylthio, and

$-N(R_9)_2$ ;

or a pharmaceutically acceptable salt thereof.

4. (original) A compound of the formula (II):



(II)

wherein:

$X'$  is selected from the group consisting of  $-CH(R_9)-$ ,  $-CH(R_9)-alkylene$ , and

-CH(R<sub>9</sub>)-alkenylene-; wherein the alkylene and alkenylene are optionally interrupted with one or more -O- groups;

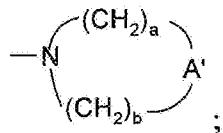
R<sub>1</sub> and R<sub>1'</sub> are independently selected from the group consisting of:

- hydrogen,
- alkyl,
- alkenyl,
- aryl,
- arylalkylenyl,
- heteroaryl,
- heteroarylalkylenyl,
- heterocyclyl,
- heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

- hydroxy,
- alkyl,
- haloalkyl,
- hydroxyalkyl,
- alkoxy,
- haloalkoxy,
- halogen,
- cyano,
- nitro,
- arylsulfonyl,
- alkylsulfonyl, and
- N(R<sub>9</sub>)<sub>2</sub>,

or R<sub>1</sub> and R<sub>1'</sub> can join together to form a ring of the formula:



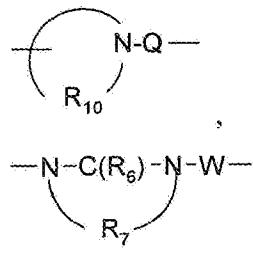
R<sub>2</sub> is selected from the group consisting of:

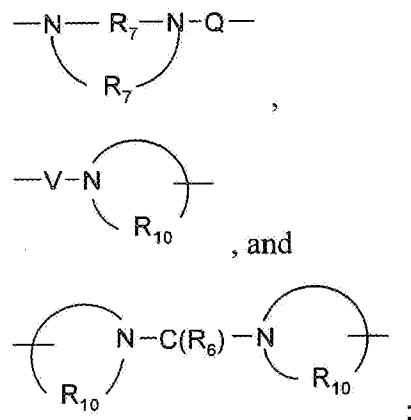
- R<sub>4</sub>,
- X-R<sub>4</sub>,
- X-Y-R<sub>4</sub>, and
- X-R<sub>5</sub>;

X is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclene, and optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

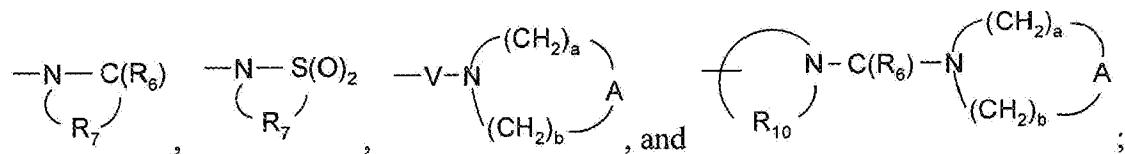
- O-,
- S(O)<sub>0-2</sub>-,
- S(O)<sub>2</sub>-N(R<sub>8</sub>)-,
- C(R<sub>6</sub>)-,
- C(R<sub>6</sub>)-O-,
- O-C(R<sub>6</sub>)-,
- O-C(O)-O-,
- N(R<sub>8</sub>)-Q-,
- C(R<sub>6</sub>)-N(R<sub>8</sub>)-,
- O-C(R<sub>6</sub>)-N(R<sub>8</sub>)-,
- C(R<sub>6</sub>)-N(OR<sub>9</sub>)-,





R<sub>4</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkylenyloxy, heteroaryl, heteroaryloxy, heteroarylalkylenyloxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkylenyloxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R<sub>5</sub> is selected from the group consisting of:



R<sub>6</sub> is selected from the group consisting of =O and =S;

R<sub>7</sub> is C<sub>2-7</sub> alkylene;

R<sub>8</sub> is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

R<sub>9</sub> is selected from the group consisting of hydrogen and alkyl;

R<sub>10</sub> is C<sub>3-8</sub> alkylene;

A is selected from the group consisting of -O-, -C(O)-, -CH<sub>2</sub>-, -S(O)<sub>0-2-</sub>, and -N(R<sub>4</sub>)-;

A' is selected from the group consisting of -O-, -C(O)-, -CH<sub>2</sub>-, -S(O)<sub>0-2-</sub>, -N(R<sub>4</sub>)-, and

-N(Q-R<sub>4</sub>)-;

Q is selected from the group consisting of a bond, -C(R<sub>6</sub>)-, -C(R<sub>6</sub>)-C(R<sub>6</sub>)-, -S(O)<sub>2</sub>-, -C(R<sub>6</sub>)-N(R<sub>8</sub>)-W-, -S(O)<sub>2</sub>-N(R<sub>8</sub>)-, -C(R<sub>6</sub>)-O-, and -C(R<sub>6</sub>)-N(OR<sub>9</sub>)-;

V is selected from the group consisting of -C(R<sub>6</sub>)-, -O-C(R<sub>6</sub>)-, -N(R<sub>8</sub>)-C(R<sub>6</sub>)-, and -S(O)<sub>2</sub>-;

W is selected from the group consisting of a bond, -C(O)-, and -S(O)<sub>2</sub>;

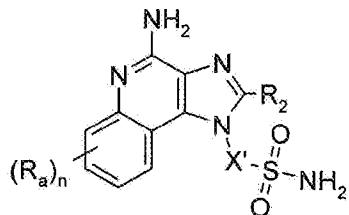
a and b are independently integers from 1 to 6 with the proviso that a + b is ≤ 7;

R<sub>a</sub> is selected from the group consisting of fluoro, alkyl, haloalkyl, alkoxy, and -N(R<sub>9</sub>)<sub>2</sub>; and

n is 0 to 4;

or a pharmaceutically acceptable salt thereof.

5. (original) A compound of the formula (IIa):



(IIa)

wherein:

X' is selected from the group consisting of -CH(R<sub>9</sub>)-, -CH(R<sub>9</sub>)-alkylene, and -CH(R<sub>9</sub>)-alkenylene-; wherein the alkylene and alkenylene are optionally interrupted with one or more -O- groups;

R<sub>2</sub> is selected from the group consisting of:

-R<sub>4</sub>,

-X-R<sub>4</sub>,

-X-Y-R<sub>4</sub>, and

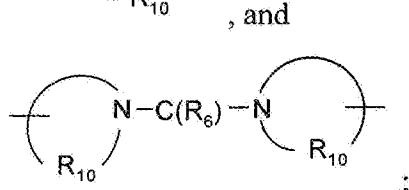
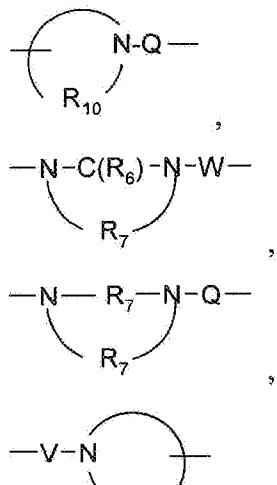
-X- R<sub>5</sub>;

X is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclene, wherein the alkylene, alkenylene, and alkynylene groups can

be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclylene, and optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

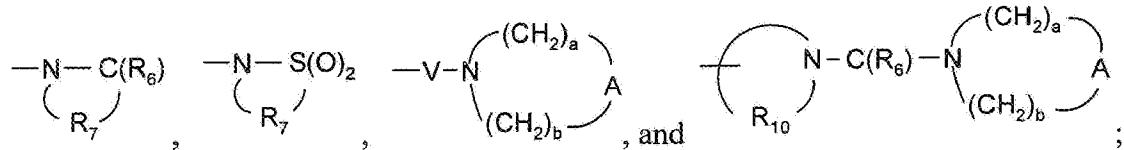
- O-,
- S(O)<sub>0-2-</sub>,
- S(O)<sub>2</sub>-N(R<sub>8</sub>)-,
- C(R<sub>6</sub>)-,
- C(R<sub>6</sub>)-O-,
- O-C(R<sub>6</sub>)-,
- O-C(O)-O-,
- N(R<sub>8</sub>)-Q-,
- C(R<sub>6</sub>)-N(R<sub>8</sub>)-,
- O-C(R<sub>6</sub>)-N(R<sub>8</sub>)-,
- C(R<sub>6</sub>)-N(OR<sub>9</sub>)-,



R<sub>4</sub> is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylényl, and heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl,

heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkylenyloxy, heteroaryl, heteroaryloxy, heteroarylalkylenyloxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkylenyloxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

$R_5$  is selected from the group consisting of:



$R_6$  is selected from the group consisting of =O and =S;

$R_7$  is  $C_{2-7}$  alkylene;

$R_8$  is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

$R_9$  is selected from the group consisting of hydrogen and alkyl;

$R_{10}$  is  $C_{3-8}$  alkylene;

$A$  is selected from the group consisting of  $-O-$ ,  $-C(O)-$ ,  $-CH_2-$ ,  $-S(O)_{0-2-}$ , and  $-N(R_4)-$ ;

$Q$  is selected from the group consisting of a bond,  $-C(R_6)-$ ,  $-C(R_6)-C(R_6)-$ ,  $-S(O)_{2-}$ ,  $-C(R_6)-N(R_8)-W-$ ,  $-S(O)_2-N(R_8)-$ ,  $-C(R_6)-O-$ , and  $-C(R_6)-N(OR_9)-$ ;

$V$  is selected from the group consisting of  $-C(R_6)-$ ,  $-O-C(R_6)-$ ,  $-N(R_8)-C(R_6)-$ , and  $-S(O)_{2-}$ ;

$W$  is selected from the group consisting of a bond,  $-C(O)-$ , and  $-S(O)_{2-}$ ;

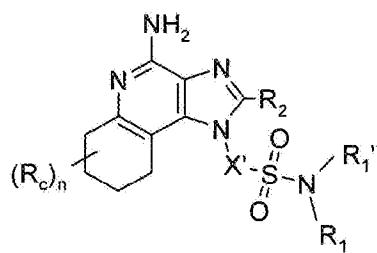
$a$  and  $b$  are independently integers from 1 to 6 with the proviso that  $a + b$  is  $\leq 7$ ;

$R_a$  is selected from the group consisting of fluoro, alkyl, haloalkyl, alkoxy, and  $-N(R_9)_2$ ; and

$n$  is 0 to 4;

or a pharmaceutically acceptable salt thereof.

6. (original) A compound of the formula (III):



wherein:

$X'$  is selected from the group consisting of  $-\text{CH}(\text{R}_9)-$ ,  $-\text{CH}(\text{R}_9)\text{-alkylene}$ , and  $-\text{CH}(\text{R}_9)\text{-alkenylene}$ ; wherein the alkylene and alkenylene are optionally interrupted with one or more  $-\text{O}-$  groups;

$\text{R}_1$  and  $\text{R}_1'$  are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

heterocyclyl,

heterocyclalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,

alkyl,

haloalkyl,

hydroxyalkyl,

alkoxy,

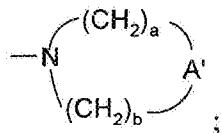
haloalkoxy,

halogen,

cyano,

nitro,  
 arylsulfonyl,  
 alkylsulfonyl, and  
 $\text{-N}(\text{R}_9)_2$ ,

or  $\text{R}_1$  and  $\text{R}_1'$  can join together to form a ring of the formula:



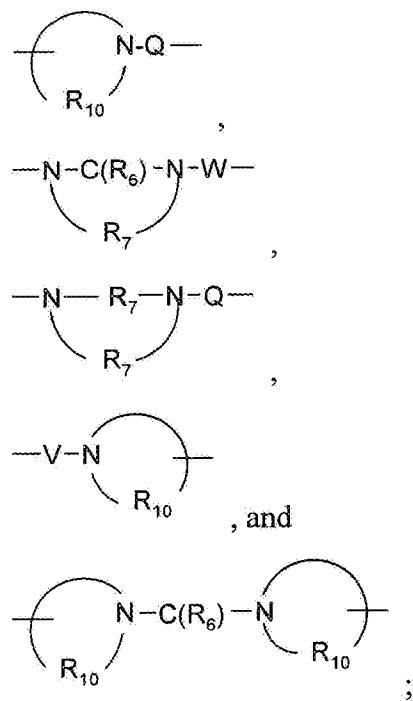
$\text{R}_2$  is selected from the group consisting of:

- $\text{-R}_4$ ,
- $\text{-X-R}_4$ ,
- $\text{-X-Y-R}_4$ , and
- $\text{-X-R}_5$ ;

$\text{X}$  is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclene, and optionally interrupted by one or more  $\text{-O-}$  groups;

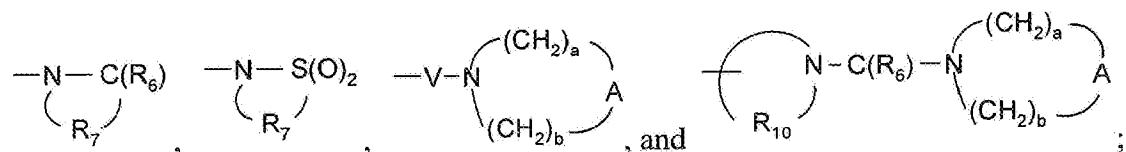
$\text{Y}$  is selected from the group consisting of:

- $\text{-O-}$ ,
- $\text{-S(O)}_{0-2}\text{-}$ ,
- $\text{-S(O)}_2\text{-N}(\text{R}_8)\text{-}$ ,
- $\text{-C(R}_6\text{)}\text{-}$ ,
- $\text{-C(R}_6\text{)-O-}$ ,
- $\text{-O-C(R}_6\text{)-}$ ,
- $\text{-O-C(O)-O-}$ ,
- $\text{-N}(\text{R}_8)\text{-Q-}$ ,
- $\text{-C(R}_6\text{)-N}(\text{R}_8)\text{-}$ ,
- $\text{-O-C(R}_6\text{)-N}(\text{R}_8)\text{-}$ ,
- $\text{-C(R}_6\text{)-N(OR}_9\text{)-}$ ,



$R_4$  is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkylenyloxy, heteroaryl, heteroaryloxy, heteroarylalkylenyloxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkylenyloxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

$R_5$  is selected from the group consisting of:



$R_6$  is selected from the group consisting of =O and =S;

$R_7$  is  $C_{2-7}$  alkylene;

$R_8$  is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

$R_9$  is selected from the group consisting of hydrogen and alkyl;

$R_{10}$  is  $C_{3-8}$  alkylene;

$A$  is selected from the group consisting of  $-O-$ ,  $-C(O)-$ ,  $-CH_2-$ ,  $-S(O)_{0-2}-$ , and  $-N(R_4)-$ ;

$A'$  is selected from the group consisting of  $-O-$ ,  $-C(O)-$ ,  $-CH_2-$ ,  $-S(O)_{0-2}-$ ,  $-N(R_4)-$ , and  $-N(Q-R_4)-$ ;

$Q$  is selected from the group consisting of a bond,  $-C(R_6)-$ ,  $-C(R_6)-C(R_6)-$ ,  $-S(O)_2-$ ,  $-C(R_6)-N(R_8)-W-$ ,  $-S(O)_2-N(R_8)-$ ,  $-C(R_6)-O-$ , and  $-C(R_6)-N(OR_9)-$ ;

$V$  is selected from the group consisting of  $-C(R_6)-$ ,  $-O-C(R_6)-$ ,  $-N(R_8)-C(R_6)-$ , and  $-S(O)_2-$ ;

$W$  is selected from the group consisting of a bond,  $-C(O)-$ , and  $-S(O)_2-$ ;

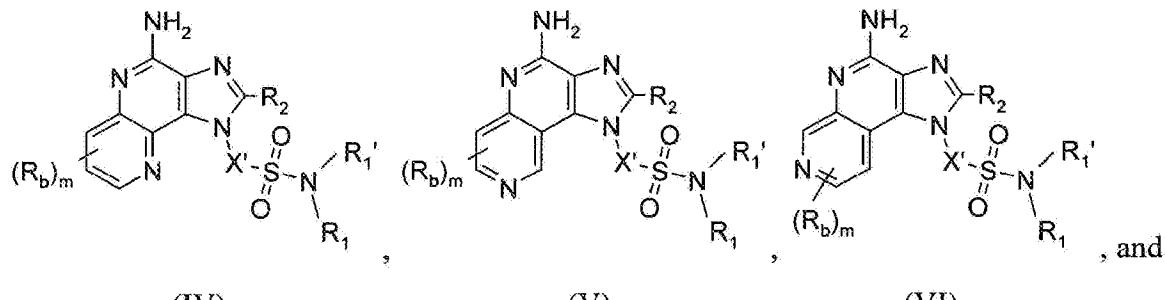
$a$  and  $b$  are independently integers from 1 to 6 with the proviso that  $a + b$  is  $\leq 7$ ;

$R_c$  is selected from the group consisting of halogen, hydroxy, alkyl, alkenyl, haloalkyl, alkoxy, alkylthio, and  $-N(R_9)_2$ ; and

$n$  is 0 to 4;

or a pharmaceutically acceptable salt thereof.

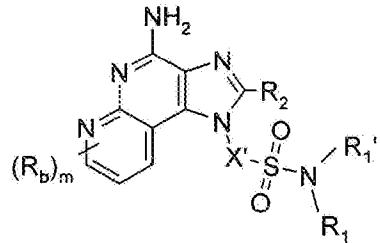
7. (original) A compound selected from the group consisting of formulas (IV, V, VI, and VII):



(IV)

(V)

(VI)



(VII)

wherein:

X' is selected from the group consisting of -CH(R<sub>9</sub>)-, -CH(R<sub>9</sub>)-alkylene, and -CH(R<sub>9</sub>)-alkenylene; wherein the alkylene and alkenylene are optionally interrupted with one or more -O- groups;

R<sub>1</sub> and R<sub>1'</sub> are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

heterocyclyl,

heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,

alkyl,

haloalkyl,

hydroxyalkyl,

alkoxy,

haloalkoxy,

halogen,

cyano,

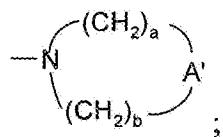
nitro,

arylsulfonyl,

alkylsulfonyl, and

-N(R<sub>9</sub>)<sub>2</sub>,

or R<sub>1</sub> and R<sub>1'</sub> can join together to form a ring of the formula:



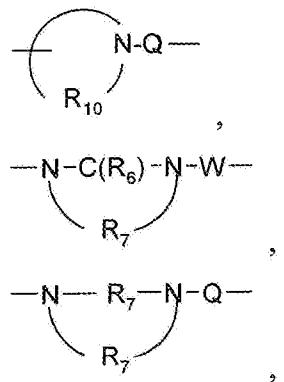
$R_2$  is selected from the group consisting of:

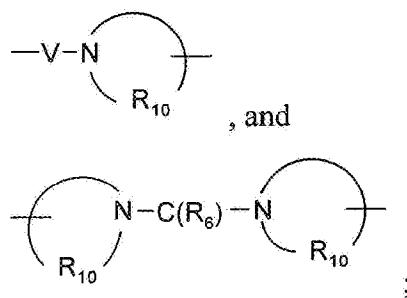
- $R_4$ ,
- $X-R_4$ ,
- $X-Y-R_4$ , and
- $X-R_5$ ;

$X$  is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclene, and optionally interrupted by one or more -O- groups;

$Y$  is selected from the group consisting of:

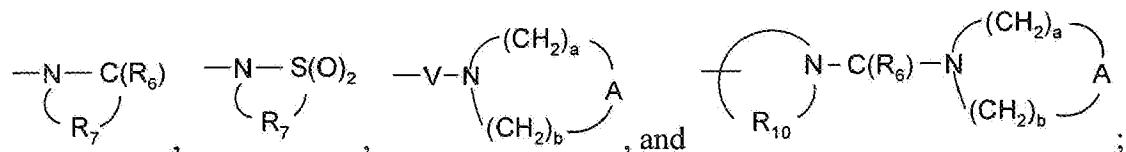
- O-,
- S(O)<sub>0-2</sub>-,
- S(O)<sub>2</sub>-N(R<sub>8</sub>)-,
- C(R<sub>6</sub>)-,
- C(R<sub>6</sub>)-O-,
- O-C(R<sub>6</sub>)-,
- O-C(O)-O-,
- N(R<sub>8</sub>)-Q-,
- C(R<sub>6</sub>)-N(R<sub>8</sub>)-,
- O-C(R<sub>6</sub>)-N(R<sub>8</sub>)-,
- C(R<sub>6</sub>)-N(OR<sub>9</sub>)-,





$R_4$  is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkylenyloxy, heteroaryl, heteroaryloxy, heteroarylalkylenyloxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkylenyloxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

$R_5$  is selected from the group consisting of:



$R_6$  is selected from the group consisting of =O and =S;

$R_7$  is  $C_{2-7}$  alkylene;

$R_8$  is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

$R_9$  is selected from the group consisting of hydrogen and alkyl;

$R_{10}$  is  $C_{3-8}$  alkylene;

$A$  is selected from the group consisting of -O-, -C(O)-, -CH<sub>2</sub>-, -S(O)<sub>0-2</sub>-, and -N(R<sub>4</sub>)-;

$A'$  is selected from the group consisting of -O-, -C(O)-, -CH<sub>2</sub>-, -S(O)<sub>0-2</sub>-, -N(R<sub>4</sub>)-, and -N(Q-R<sub>4</sub>)-;

$Q$  is selected from the group consisting of a bond, -C(R<sub>6</sub>)-, -C(R<sub>6</sub>)-C(R<sub>6</sub>)-,

-S(O)<sub>2</sub>-, -C(R<sub>6</sub>)-N(R<sub>8</sub>)-W-, -S(O)<sub>2</sub>-N(R<sub>8</sub>)-, -C(R<sub>6</sub>)-O-, and -C(R<sub>6</sub>)-N(OR<sub>9</sub>)-;

V is selected from the group consisting of -C(R<sub>6</sub>)-, -O-C(R<sub>6</sub>)-, -N(R<sub>8</sub>)-C(R<sub>6</sub>)-, and -S(O)<sub>2</sub>-;

W is selected from the group consisting of a bond, -C(O)-, and -S(O)<sub>2</sub>-;

a and b are independently integers from 1 to 6 with the proviso that a + b is ≤ 7;

R<sub>b</sub> is selected from the group consisting of halogen, hydroxy, alkyl, alkenyl, haloalkyl, alkoxy, and -N(R<sub>9</sub>)<sub>2</sub>; and

m is 0 to 3;

or a pharmaceutically acceptable salt thereof.

8-9. (canceled)

10. (original) The compound or salt of claim 3 wherein R<sub>A'</sub> and R<sub>B'</sub> are independently selected from the group consisting of hydrogen and C<sub>1-4</sub> alkyl.

11. (currently amended) The compound or salt of claim 7-~~or claim 8~~ wherein m is 0.

12. (currently amended) The compound or salt of any one of claims 4, 5, or 6 wherein n is 0.

13. (canceled)

14. (currently amended) The compound or salt of claim 243 wherein R<sub>1'</sub> is hydrogen or alkyl, and R<sub>1</sub> is selected from the group consisting of hydrogen, alkyl, aryl, substituted aryl, arylalkylenyl, substituted arylalkylenyl, and heteroaryl.

15. (currently amended) The compound or salt of claim 243 wherein R<sub>1'</sub> is hydrogen or methyl, and R<sub>1</sub> is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, cyclohexyl, phenyl, 4-methoxyphenyl, benzyl, 4-methoxybenzyl, 2-pyridyl, 3-pyridyl, 4-chlorophenyl, and 4-fluorophenyl.

16. (original) The compound or salt of claim 15 wherein R<sub>1</sub> and R<sub>1'</sub> are both hydrogen.

17. (canceled)

18. (currently amended) The compound or salt of claim 247 wherein R<sub>1</sub> and R<sub>1'</sub> join together to form a morpholine ring.

19. (canceled)

20. (currently amended) The compound or salt of claim 249 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkyl-O-C<sub>1-4</sub> alkylene, and HO-C<sub>1-3</sub> alkylene.

21. (original) The compound or salt of claim 20 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, methyl, ethyl, n-propyl, n-butyl, hydroxymethyl, 2-hydroxyethyl, ethoxymethyl, and 2-methoxyethyl.

22. (canceled)

23. (currently amended) The compound or salt of any one of claims 21 through 24 wherein X' is -(CH<sub>2</sub>)<sub>1-7</sub>-.

24. (currently amended) The compound or salt of any one of claims 21 through 24 wherein X' is -(CH<sub>2</sub>)-C(CH<sub>3</sub>)<sub>2</sub>-.

25. (currently amended) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of any one of claims 21 through 24 in combination with a pharmaceutically acceptable carrier.

26. (currently amended) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of any one of claims 21 through 24 or a pharmaceutical composition of claim 25 to the animal.

27. (currently amended) A method of treating a viral disease in an animal in need thereof comprising administering a therapeutically effective amount of a compound or salt of any one of claims ~~21 through 24 or a pharmaceutical composition of claim 25~~ to the animal.

28. (currently amended) A method of treating a neoplastic disease in an animal in need thereof comprising administering a therapeutically effective amount of a compound or salt of any one of claims ~~21 through 24 or a pharmaceutical composition of claim 25~~ to the animal.

29-34. (canceled)

35. (new) The compound or salt of claim 3 wherein R<sub>1</sub>' is hydrogen or methyl, and R<sub>1</sub> is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, cyclohexyl, phenyl, 4-methoxyphenyl, benzyl, 4-methoxybenzyl, 2-pyridyl, 3-pyridyl, 4-chlorophenyl, and 4-fluorophenyl.

36. (new) The compound or salt of claim 3 wherein R<sub>1</sub> and R<sub>1</sub>' are both hydrogen.

37. (new) The compound or salt of claim 3 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, methyl, ethyl, n-propyl, n-butyl, hydroxymethyl, 2-hydroxyethyl, ethoxymethyl, and 2-methoxyethyl.

38. (new) The compound or salt of claim 3 wherein X' is -(CH<sub>2</sub>)<sub>1-7</sub>.

39. (new) The compound or salt of claim 4 wherein R<sub>1</sub>' is hydrogen or alkyl, and R<sub>1</sub> is selected from the group consisting of hydrogen, alkyl, aryl, substituted aryl, arylalkylenyl, substituted arylalkylenyl, and heteroaryl.

40. (new) The compound or salt of claim 4 wherein R<sub>1</sub>' is hydrogen or methyl, and R<sub>1</sub> is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, cyclohexyl, phenyl,

4-methoxyphenyl, benzyl, 4-methoxybenzyl, 2-pyridyl, 3-pyridyl, 4-chlorophenyl, and 4-fluorophenyl.

41. (new) The compound or salt of claim 4 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkyl-O-C<sub>1-4</sub> alkylenyl, and HO-C<sub>1-3</sub> alkylenyl.

42. (new) The compound or salt of claim 41 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, methyl, ethyl, n-propyl, n-butyl, hydroxymethyl, 2-hydroxyethyl, ethoxymethyl, and 2-methoxyethyl.

43. (new) The compound or salt of claim 4 wherein X' is -(CH<sub>2</sub>)<sub>1-7</sub>.

44. (new) The compound or salt of claim 4 wherein X' is -(CH<sub>2</sub>)-C(CH<sub>3</sub>)<sub>2</sub>-.

45. (new) The compound or salt of claim 5 wherein n is 0.

46. (new) The compound or salt of claim 5 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkyl-O-C<sub>1-4</sub> alkylenyl, and HO-C<sub>1-3</sub> alkylenyl.

47. (new) The compound or salt of claim 46 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, methyl, ethyl, n-propyl, n-butyl, hydroxymethyl, 2-hydroxyethyl, ethoxymethyl, and 2-methoxyethyl.

48. (new) The compound or salt of claim 5 wherein X' is -(CH<sub>2</sub>)<sub>1-7</sub>.

49. (new) The compound or salt of claim 5 wherein X' is -(CH<sub>2</sub>)-C(CH<sub>3</sub>)<sub>2</sub>-.

50. (new) The compound or salt of claim 6 wherein n is 0.

51. (new) The compound or salt of claim 6 wherein R<sub>1</sub>' is hydrogen or methyl, and R<sub>4</sub> is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, cyclohexyl, phenyl,

4-methoxyphenyl, benzyl, 4-methoxybenzyl, 2-pyridyl, 3-pyridyl, 4-chlorophenyl, and 4-fluorophenyl.

52. (new) The compound or salt of claim 6 wherein R<sub>1</sub> and R<sub>1'</sub> are both hydrogen.

53. (new) The compound or salt of claim 6 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, methyl, ethyl, n-propyl, n-butyl, hydroxymethyl, 2-hydroxyethyl, ethoxymethyl, and 2-methoxyethyl.

54. (new) The compound or salt of claim 6 wherein X' is -(CH<sub>2</sub>)<sub>1-7</sub>.

55. (new) The compound or salt of claim 7 wherein R<sub>1'</sub> is hydrogen or methyl, and R<sub>1</sub> is selected from the group consisting of hydrogen, methyl, ethyl, propyl, butyl, cyclohexyl, phenyl, 4-methoxyphenyl, benzyl, 4-methoxybenzyl, 2-pyridyl, 3-pyridyl, 4-chlorophenyl, and 4-fluorophenyl.

56. (new) The compound or salt of claim 7 wherein R<sub>1</sub> and R<sub>1'</sub> are both hydrogen.

57. (new) The compound or salt of claim 7 wherein R<sub>2</sub> is selected from the group consisting of hydrogen, methyl, ethyl, n-propyl, n-butyl, hydroxymethyl, 2-hydroxyethyl, ethoxymethyl, and 2-methoxyethyl.

58. (new) The compound or salt of claim 7 wherein X' is -(CH<sub>2</sub>)<sub>1-7</sub>.

59. (new) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 3 in combination with a pharmaceutically acceptable carrier.

60. (new) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 3 to the animal.

61. (new) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 4 in combination with a pharmaceutically acceptable carrier.
62. (new) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 4 to the animal.
63. (new) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 5 in combination with a pharmaceutically acceptable carrier.
64. (new) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 5 to the animal.
65. (new) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 6 in combination with a pharmaceutically acceptable carrier.
66. (new) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 6 to the animal.
67. (new) A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 7 in combination with a pharmaceutically acceptable carrier.
68. (new) A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 7 to the animal.